

Áreas de polígonos

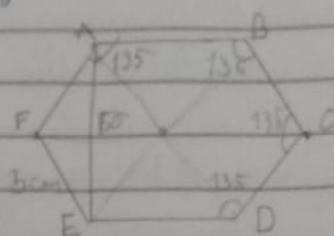
①

$$(n-2) \cdot 180$$

$$(6-2) \cdot 180 = 720^\circ$$

$$720 - 540 = 180$$

$$F + E = 180$$



$$135 \times 4 = 540$$

$$x^2 = 5^2 + 5^2$$

$$x^2 = 50$$

$$x = 5\sqrt{2}$$

$$A_0 = 5 \cdot 5 \cdot \sqrt{2}$$

$$A_0 = 25\sqrt{2}$$

$$A_T = \frac{(5 \cdot 5)}{5 \cdot \sqrt{2}}$$

$$5 \cdot \sqrt{2}$$

$$A_T = \frac{5 \sqrt{2}}{2}$$

$$A_T = \frac{(5 \sqrt{2}) \cdot 5 \sqrt{2}}{2}$$

$$2$$

$$A_T = \frac{25}{2}$$

$$A_H = 2 \cdot A_T + A_0$$

[E]

$$A_H = 2 \cdot \left(\frac{25}{2} \right) + 25\sqrt{2}$$

$$A_H = 25 + 25\sqrt{2}$$

$$A_H = 25 \cdot (\sqrt{2} + 1)$$

②

$$A = \frac{l^2 \cdot \sqrt{3}}{4}$$

$$16\sqrt{3} = \frac{l^2 \cdot \sqrt{3}}{4}$$

$$64 \cdot \sqrt{3} = l^2 \cdot \sqrt{3}$$

$$64 = l^2$$

$$l = 8$$

$$h = \frac{l \sqrt{3}}{2}$$

$$h = \frac{8 \sqrt{3}}{2}$$

$$h = 4\sqrt{3}$$

$$h = d$$

$$d = l \sqrt{2}$$

$$4\sqrt{3} = l \cdot \sqrt{2}$$

$$l = \frac{4\sqrt{3}}{\sqrt{2}}$$

$$l = \frac{4\sqrt{6}}{2}$$

$$l = 2\sqrt{6}$$

$$A = l^2$$

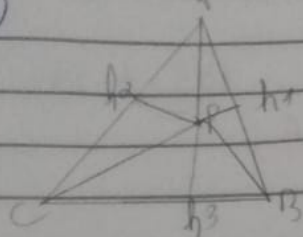
$$A = (2\sqrt{6})^2$$

$$A = 4 \cdot 6$$

$$A = 24 \text{ m}^2$$

[B]

③



$$APC = \frac{2h_1}{2}$$

$$APB = \frac{2h_2}{2}$$

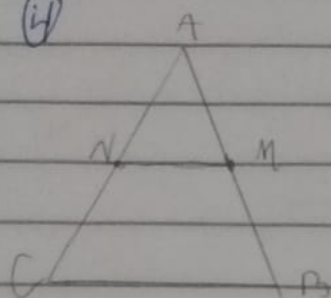
$$BPC = \frac{2h_3}{2}$$

$$h_1 + h_2 + h_3 = \sqrt{3}$$

$$A = \frac{2^2 \sqrt{3}}{4} = \sqrt{3}$$

B

④



$$X = 96 - \frac{1}{4}(96)$$

$$X = 96 - 24$$

$$X = 72$$

$$72 \text{ m}^2$$

⑤

$$10^2 = 6^2 + AC^2$$

$$100 = 36 + AC^2$$

$$AC = 8$$

$$A = \frac{Bh}{2}$$

$$A = \frac{8.6}{2}$$

$$A = 24 \text{ cm}$$

A

$$\frac{4^2 \sqrt{3}}{4}$$

$$A = \frac{4^2 \sqrt{3}}{4}$$

$$A = \frac{16 \sqrt{3}}{4}$$

$$A = 4 \sqrt{3}$$

$$(4\sqrt{3})^2$$

$$(4\sqrt{3}) \cdot (4\sqrt{3})$$

$$16 \sqrt{9}$$

$$16 \cdot 3$$

$$48 \text{ m}^2$$

$$48 \text{ m}^2$$